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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,902	08/27/2002	Michio Suzuki	JP920010239U	7980

25299 7590 05/24/2004

IBM CORPORATION
PO BOX 12195
DEPT 9CCA, BLDG 002
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

EISEN, ALEXANDER

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 05/24/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/064,902	Applicant(s) SUZUKI ET AL.	
	Examiner Alexander Eisen	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2002.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 15-17 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-14 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☒ Claim(s) 15-17 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Alexander Eisen
ALEXANDER EISEN
5/19/04

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-14 and 18-21, drawn to a computer with a keyboard having illuminated keys, classified in class 345, subclass 170.
 - II. Claims 15-17, drawn to a display meter (measurement system using radiation), classified in class 702, subclass 8.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as display meter. See MPEP § 806.05(d).
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Scott W. Reid on April 5, 2004 a provisional election was made without traverse to prosecute the invention of Invention I, claims 1-14 and 18-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

5. Claim 13 is objected to because of the following informalities: spacing between the lines 6 and 7 is incorrect (should be double-spaced). Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-7 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patak et al., ("Patak"), US 5,743,381 in view of Yoshikawa et al., (hereinafter Yoshikawa), US 6,036,326.

With respect to claims 1 and 18 Patak discloses a computer 10 comprising a main body 14 with at least one key (keyboard 24), a display unit 12 that display an image according with operation executed by the main body.

Patak also discloses an apparatus for illuminating the keys on keyboards for providing an inexpensive illuminating of the keyboard without increasing overall ambient lighting.

Patak does not disclose a light accumulator recess formed on the top surface of a key, the shape of the recess being indicative of an operation type of the key, and a light accumulator embedded in the light accumulator recess.

Yoshikawa teaches a key top member of a key for use in a keyboard as a data input device of a computer, wherein a light accumulator recess is formed on the a top surface, the

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recess being indicative of an operative type of the key and a light accumulator is being embedded in the light accumulator recess (see FIGS. 8A to 8D; col. 9, line 32 - col. 10, line 36, for example).

It would have been obvious to one of ordinary skill in the art at the time when the invention was made to use the key arrangement taught by Yoshikawa in the keyboard of Patak, because it would allow to illuminate the key top members without using electric power source and therefore to make the use of a computer more economical and less dependent on the power source.

As to claims 2, 3, 4, 19 and 20, as can be seen from FIGS. 8A to 8D, the light accumulator recess has a certain depth, which can provide a predetermined residual brightness, and since no criticality of this size is shown, it would be obvious to one of ordinary skills in the art by the way of experimentation to choose any acceptable depth for adequate lighting of the key.

As to claim 5, the operation type of the key is identified by a predetermined character or symbol (character A is shown in Yoshikawa examples), and the light accumulator is formed in the shape of the predetermined character or symbol (as in FIGS 8).

As to claim 6, Yoshikawa teaches the light accumulator recess surrounding the shape of the predetermined character or symbol (as in FIGS. 10A - 10C; col. 11, lines 24-53).

As to claim 7, Yoshikawa teaches a light accumulator recess 38 that is formed to cover the top surface of a key except for an area of the predetermined character or symbol (see FIGS. 11; col. 12, lines 7-21).

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As to claim 21, it would have been obvious to one of ordinary skills in the art that any light source, back light source of the LCD display including, can provide charge to light accumulating material of the keys.

Allowable Subject Matter

8. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: none of the references, either individually or in combination, teach or fairly suggest a computer as claimed in claim 1 and comprising a residual emission level meter having a light accumulator as an element and enabled to display a residual emission level of the light accumulator embedded in the light accumulator recess.

10. Claims 9-14 are allowed.

11. The following is an examiner's statement of reasons for allowance: none of the references, either singularly or in combination, teach or fairly suggest a computer comprising a display meter provided at the main body of the display unit and composed of the plurality of light accumulator films that are different from each other in residual light brightness in a predetermined way.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
13. Kouno et al., US 5,655,826, discloses a key on a keyboard having phosphorescent layer for accumulating a light so that the power consumption of power source for lighting the key can be saved.
14. Misawa et al., JP 09-009106, discloses a button having a light accumulator for operability in a dark place.
15. Umezawa, JP 05-314855, teaches a push button luminous in absence of electric power.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Eisen whose telephone number is **(703) 306-2988**. The examiner can normally be reached on M-F (9:00 a.m. - 4:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on **(703) 305-4709**.

Any response to this action should be **mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or **faxed to:**

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivered responses should be **brought to:** Crystal Park Two, 2121 Crystal Drive, Arlington, Virginia, Sixth Floor Receptionist.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be **directed to:** Technology Center 2600 Customer Service Office, whose telephone number is **(703) 306-0377**.

A handwritten signature in black ink, appearing to read "Alexander Eisen".

Alexander Eisen
May 19, 2004